

**REMARKS**

The Office Action dated October 20, 2008, has been received and carefully reviewed. The preceding amendments and the following remarks form a full and complete response thereto. Claim 1 has been amended to further recite the functions of judgment means and subsidiary means. Support for the amendments can be found, *inter alia*, in Examples 2 and 3 (page 10, line 4-page 12, line 26) of the specification. No new matter has been added. Claims 2 and 3 have been cancelled. Accordingly, claim 1 is pending in this application and is submitted for reconsideration.

Claim 1 was rejected under 35 U.S.C. § 103(a) as being obvious by U.S. Patent No. 5,333,111 to Chaiken (“Chaiken”) in view of U.S. Patent No. 6,192,777 to Williams (“Williams”). Applicants respectfully traverse the rejection and submit that the cited prior art, taken singly or in combination, fails to disclose or suggest each and every feature of the claimed invention.

Amended claim 1 defines a teaching device for an automatic cutting machine having a cutting table with a conveyor conveying a sheet along a longitudinal direction of the cutting area, a cutting head, and a cutting area on the table for placing a sheet within the cutting area, the cutting head being capable of cutting the sheet only within the cutting area, the teaching device, upon the designation of at least two teaching points on the sheet, computing a position and a slope of the sheet to the cutting area, correcting marking data including cutting pattern of parts to be cut out from the sheet in accordance with the position and the slope of the sheet, and cutting the sheet with corrected marking data. The teaching device includes judgment means and subsidiary means. The judgment means judges whether the cutting pattern is (1) contained within

the cutting area, (2) not contained within the cutting area along the longitudinal direction, after designation of the teaching points and the correction of the marking data, or (3) not contained within the cutting area along a left-right direction perpendicular to the longitudinal direction. The subsidiary means evaluates whether movement of the marking data along the longitudinal direction in such a way that all the parts are moved or movement of the sheet along the longitudinal direction will make the cutting pattern within the cutting area, if the cutting pattern is not contained within the cutting area along the longitudinal direction; moves the marking data along the longitudinal direction in such a way that all the parts are moved or the sheet along the longitudinal direction, if one of the movements is evaluated as making the cutting pattern within the cutting area; evaluates whether movement of the marking data along the left-right direction in such a way that all the parts are moved will make the cutting pattern within cutting area; and moves the marking data along the left-right direction in such a way that all the parts are moved, if movement along the left-right direction is evaluated as making the cutting pattern within the cutting area.

Accordingly, claim 1 has been amended to clarify that all cutting patterns in the marking data are moved, namely, if a portion of the cutting patterns is out of the cutting area, the all the cutting patterns are moved by moving the marking data storage. See page 10 of the specification, Example 2. Claim 1 has also been amended to recite the feature where, if the cutting patterns are out of the cutting area in the longitudinal direction, then one of the driving of the conveyor belt and the movement of the marking data along the left-right direction is done, and if the cutting patterns are out of the cutting area in the top-bottom direction, then the movement of the marking data along the top-

bottom direction is done. The subsidiary means of claim 1 evaluates whether the movement of the marking data or the movement of the sheet may make the cutting patterns within the cutting area; namely, the evaluation of both the movement of marking data and the sheet is sometimes not necessary.

Chaiken discloses a device for cutting sheet material. Chaiken is particularly directed to dealing with alignment of a plaid or stripe in the fabrics in several adjacent pieces. See, Chaiken at col.1, lines 30-33. Chaiken shows the alignment of fabric design and pattern in its Fig. 8, and misalignment in Fig 7. Chaiken also calls for an alignment “matching.”

Chaiken fails to disclose any equivalent of the judging means and subsidiary means as in claim 1 which operates together to make the cutting pattern within the cutting area. In particular, Chaiken is completely silent on any means for evaluating whether movement of the marking data along either the longitudinal direction or x-y direction will make the cutting pattern within the cutting area; and any means for moving the marking data or the sheet itself along either the longitudinal direction or in x-y direction. Rather, Chaiken defines “matching” as the alignment of fabric design repeats in the fabric from one segment of a garment to a corresponding segment. Chaiken, column 7, lines 42-46. Chaiken merely teaches matching (aligning) the cutting patterns across different segments. In Chaiken, the misalignment between fabric designs is shown in Fig.7 and the alignments between them are shown in Fig. 8. Positioning the cutting patterns into the cutting area so that they are contained in the cutting area is not contemplated by Chaiken.

Williams fails to cure the deficiencies of Chaiken. Williams defines “matching” very similarly to that of Chaiken. Williams, column 3, lines 28-30. Williams discloses that the “marker” includes data on the fabric pattern and the desired relationship of the particular garment pieces (column 3, lines 21-24), and the marker is a mathematical model on the assumption that the workpiece is free of imperfections and regularly aligned on the cutting table (column 4, lines 1-9). The marker in Williams is adjusted simply because the workpiece may have imperfections and may be irregularly or improperly aligned on the cutting table, as is shown in Fig.2B. Like Chaiken, Williams is silent on positioning the cutting patterns into the cutting area so that the cutting patterns are contained into the cutting area.

The object of the presently claimed invention is to position the cutting patterns within the cutting area. Accordingly, it is not necessary to alter the relative positions of the cutting patterns with each other. Therefore, the marking data may be moved as a whole. This feature is not suggested by Chaiken or Williams.

Since neither Chaiken nor Williams teach or suggest positioning cutting patterns into the cutting area as defined by claim 1, the rejection to claim 1 on the ground of alleged obviousness is improper. Applicants thus request that the rejection to claim 1 based on alleged obviousness be withdrawn and the claim be allowed.

Claims 2-3 have been rejected for the reason of being indefinite. Since claims 2-3 are cancelled, the rejection reason is moot.

In view of the above, all objections and rejections have been sufficiently addressed. Applicants submit that the application is now in condition for allowance and requests that claim 1 be allowed and this application passed to issue.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

Respectfully submitted,

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